IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Earle W. Jennings Application Serial No.: 08/993,442

Filed: December 18, 1997

For: Video Frame Rendering Engine

Confirmation No. 5108

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

CERTIFICATE UNDER 37 C.F.R. §3.73(b) ESTABLISHING RIGHT OF ASSIGNEE TO TAKE ACTION

1. The assignee of the entire right, title and interest hereby seeks to take action in the PTO in this matter.

IDENTIFICATION OF ASSIGNEE

2. The assignee of this matter is:

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY

8, Li-Hsin Rd. 6 Hsinchu Science Park Hsinchu, Taiwan 300-77, R.O.C.

PERSON AUTHORIZED TO SIGN

3. Daniel R. McClure Attorney for Assignee

4. A chain of title from the inventor to the current assignee is shown below: From: Jennings, Earle W., III Hyundai Electronics America, a California Corporation Recorded: June 1, 1998; Reel/Frame: 009222/0725 From: Hyundai Electronics America, a California Corporation Hynix Semiconductor America, Inc. Recorded: October 15, 2004; Reel/Frame: 015246/0771 From: Hynix Semiconductor America, Inc. Hynix Semiconductor, Inc. To: Recorded: October 12, 2004; Reel/Frame: 015232/0800 From: Hynix Semiconductor, Inc. MagnaChip Semiconductor, Ltd. Recorded: January 10, 2005; Reel/Frame: 016216/0649 From: MagnaChip Semiconductor, Ltd. Taiwan Semiconductor Manufacturing Company Recorded: September 24, 2008; Reel/Frame: 021578/0346 **DECLARATIONS**

the	5.	I, the undersigned, have reviewed all the documents in the chain of title of
		□ application⋈ patent

matter identified above and, to the best of my knowledge and belief, title is in the assignee identified above.

6. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

7. I, the person signing below, aver that I am empowered to sign this statement on behalf of the assignee.

/Daniel R. McClure/

Daniel R. McClure, Reg. No. 38,962

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Docket No. 252016-9015